In the claims:

For the convenience of the Examiner, all claims being examined, whether or not amended, are presented below.

Please cancel, without prejudice, claims 27 and 67-69.

1. (**Currently amended**) A pharmaceutical composition that provides an elastin-based composition for localized delivery in vivo, said elastin-based composition consisting of ~~comprising~~ a polypeptide, wherein said polypeptide consists of ~~comprises~~ (i) an amino acid sequence at least 95% identical to SEQ ID NO: 3, (ii) ~~a bioactive fragment of SEQ ID NO: 3 that includes six or seven repeats of a hexameric sequence~~ an amino acid sequence represented by SEQ ID NO: 2 ~~1~~, or (iii) a peptide fragment ~~consisting essentially~~ of six ~~or seven~~ repeats of the hexameric sequence represented by SEQ ID NO: 1, wherein said elastin-based composition is attached to a biocompatible support or dissolved in a biocompatible matrix and has one or more biological activities selected from the group consisting of:

a) inhibiting the proliferation of smooth muscle cells in vivo;

b) stimulating the differentiation of smooth muscle cells in vivo;

c) regulating the migration of smooth muscle cells in vivo; and

d) binding to smooth muscle cells, and

wherein said elastin-based composition has an IC50/EC50 for at least one of said biological activities that is less than or equal to 10^{-3}.

2. (**Original**) The pharmaceutical composition of claim 1 wherein said elastin-based composition is soluble and has an IC50/EC50 for each of said one or more biological activities that is less than or approximately equal to 10^{-3}.

3. (**Previously presented**) The composition of claim 1 or 2 wherein said IC50/EC50 is greater than 10^{-15}.

4. (**Original**) The composition of claim 1 wherein said pharmaceutical composition provides a dose of said elastin-based composition equivalent to 10^{-8} M of a peptide having the amino acid sequence of SEQ ID NO:2 at said target site.

5. **(Cancelled)**

6. **(Previously presented)** The composition of claim 1 wherein said elastin-based composition comprises a recombinant polypeptide.

7. **(Previously presented)** The composition of claim 1 wherein said elastin-based composition comprises a synthetic peptide.

8. **(Currently amended)** The composition of claim 7 wherein said synthetic peptide ~~comprises~~ consists of six repeats of the hexameric sequence Val-Gly-Val-Ala-Pro-Gly (SEQ ID NO: 1).

9. **(Currently amended)** The composition of claim 7 wherein said synthetic peptide consists of the amino acid sequence represented by SEQ ID NO: 2 ~~comprises seven repeats of the hexameric sequence Val-Gly-Val-Ala-Pro-Gly (SEQ ID NO: 1)~~.

10. **(Original)** The composition of claim 1, wherein said elastin-based composition is crosslinked, precipitated, or coacervated.

11. **(Original)** The composition of claim 1 wherein said elastin-based composition comprises an elastin matrix produced from a blood vessel.

12. **(Previously presented)** The composition of claim 1 wherein said elastin-based composition is attached to a biocompatible support or biocompatible matrix.

13. **(Previously presented)** The composition of claim 12 wherein said biocompatible support or biocompatible matrix comprises a tube.

14. **(Previously presented)** The composition of claim 13 wherein said elastin-based composition is attached to an outer surface of said tube and additionally comprises a sheath encircling said tube.

15-21. **(Cancelled)**

22. **(Currently amended)** A method for prophylaxis or treatment of restenosis, ~~a disorder having diminished capacity to regulate smooth muscle cell function~~ comprising direct delivery of the ~~elastin-based composition provided by the~~ pharmaceutical composition of claim 61 or 62 ~~any of claims 1, 60 or 67~~ to a target site of diminished capacity to regulate smooth muscle cell function, wherein said direct delivery to said target site of diminished capacity to regulate smooth muscle cell function treats restenosis ~~said disorder is restenosis, and wherein said elastin-based composition is delivered via a biocompatible support~~.

23. **(Previously presented)** The method of claim 22 wherein said IC50/EC50 is greater than about 10^{-15}.

24. **(Original)** The method of claim 22 wherein said pharmaceutical composition provides a dose of said elastin-based composition equivalent to 10^{-8} M of a peptide having the amino acid sequence of SEQ ID NO:2 at said target site.

25. **(Cancelled)**

26. **(Previously presented)** The method of claim 22 wherein said elastin-based composition comprises a recombinant polypeptide.

27. **(Cancelled)**

28. **(Original)** The method of claim 22 wherein said elastin-based composition is crosslinked, precipitated, or coacervated.

29. (**Original**) The method of claim 22 wherein said elastin-based composition comprises an elastin matrix produced from a blood vessel.

30. (**Previously presented**) The method of claim 22, wherein said biocompatible support is a stent.

31. (**Previously presented**) The method of claim 30 wherein said biocompatible support or biocompatible matrix comprises a tube.

32. (**Previously presented**) The method of claim 22 wherein said target site is located in the cardiovascular system and is suspected or known to be at risk for restenosis.

33. (**Original**) The method of claim 22 wherein delivery comprises intravascular delivery of said elastin-based composition directly to a vascular site.

34. (**Cancelled**)

35. (**Original**) The method of claim 22 wherein said elastin-based composition is delivered to and maintained at said site.

36-47. (**Cancelled**)

48. (**Currently amended**) The pharmaceutical composition of claim 1, wherein said elastin-based composition consists of ~~comprises~~ a polypeptide consisting of ~~comprising~~ (i) an amino acid sequence identical to SEQ ID NO: 3, (ii) ~~a bioactive fragment of SEQ ID NO: 3 that includes six or seven repeats of a hexameric sequence represented by~~ an amino acid sequence identical to SEQ ID NO: 2 ~~1~~, or (iii) a peptide fragment ~~consisting essentially~~ of six ~~or seven~~ repeats of the hexameric sequence represented by SEQ ID NO: 1, wherein said elastin-based composition is attached to a biocompatible support or dissolved in a biocompatible matrix and has one or more biological activities selected from the group consisting of:

a) inhibiting the proliferation of smooth muscle cells in vivo;

b) stimulating the differentiation of smooth muscle cells in vivo;

c) regulating the migration of smooth muscle cells in vivo; and

d) binding to smooth muscle cells, and

wherein said elastin-based composition has an IC50/EC50 for at least one of said biological activities that is less than or equal to 10^{-3}.

49. (**Currently amended**) The pharmaceutical composition of claim 48, wherein said elastin-based composition consists of a polypeptide consisting of a peptide fragment ~~consists essentially~~ of six repeats of the hexameric sequence represented by SEQ ID NO: 1.

50. (**Previously presented**) The pharmaceutical composition of claim 1, wherein said elastin-based composition is derivatized by linkage to one or more additional chemical groups for promoting sustained release.

51-55. (**Cancelled**)

56. (**Currently amended**) The composition of any of claims 1, 8, 9, or 60 ~~or 67~~, where said elastin-based composition is dissolved or suspended within a biocompatible polymer matrix, which matrix permits diffusion of the elastin-based composition, to form a sustained-release composition.

57. (**Previously presented**) The composition of claim 56, wherein the biocompatible polymer matrix is selected from the group consisting of polyester, a polylactide, degradable lactic acid-glycolic acid copolymers, and poly-D-(-) hydroxybutyric acid.

58. (**Previously presented**) The composition of claim 56, wherein the biocompatible polymer matrix is formulated for coating an implantable medical device.

59. (**Previously presented**) The composition of claim 56, wherein the biocompatible polymer matrix is formulated for coating a stent.

60. **(Currently amended)** A pharmaceutical composition that provides an elastin-based composition, said elastin-based composition consisting of ~~comprising~~ a polypeptide, wherein said polypeptide consists ~~essentially~~ of (i) an amino acid sequence ~~at least 95%~~ identical to SEQ ID NO: 3, (ii) ~~a bioactive fragment of SEQ ID NO: 3 including six or seven repeats of the hexameric sequence represented in~~ an amino acid sequence identical to SEQ ID NO: 2 ~~1~~, or (iii) a peptide fragment ~~consisting essentially~~ of six ~~or seven~~ repeats of the hexameric sequence represented by SEQ ID NO: 1, wherein said elastin-based composition is attached to a biocompatible support or dissolved in a biocompatible matrix and has one or more biological activities selected from the group consisting of:

a) inhibiting the proliferation of smooth muscle cells;

b) stimulating the differentiation of smooth muscle cells;

c) regulating the migration of smooth muscle cells; and

d) binding to smooth muscle cells, and

wherein said elastin-based composition has an IC50/EC50 for at least one of said biological activities that is less than or equal to 10^{-3}.

61. **(Currently amended)** The composition of claim 60, wherein said polypeptide consists ~~essentially~~ of ~~(i)~~ an amino acid sequence identical to SEQ ID NO: 3~~, (ii) a bioactive fragment of SEQ ID NO: 3 that includes six or seven repeats of the hexameric sequence represented in SEQ ID NO: 1 or (iii) a peptide fragment consisting essentially of six or seven repeats of the hexameric sequence represented by SEQ ID NO: 1~~.

62. **(Currently amended)** The composition of claim 60, wherein said polypeptide consists ~~essentially~~ of an amino acid sequence identical to SEQ ID NO: 2 ~~(i) an amino acid sequence identical to SEQ ID NO: 3, (ii) a bioactive fragment of SEQ ID NO: 3 that includes seven repeats of the hexameric sequence represented in SEQ ID NO: 1, or (iii) a peptide fragment consisting essentially of seven repeats of the hexameric sequence represented by SEQ ID NO: 1~~.

63. **(Currently amended)** The composition of claim 60, wherein said polypeptide consists of a ~~bioactive fragment or~~ peptide fragment of ~~includes~~ six repeats of the hexameric sequence represented in SEQ ID NO: 1.

64. **(Cancelled)**

65. **(Currently amended)** The composition of claim 60, wherein said elastin-based composition is attached to a biocompatible support ~~bioactive fragment or peptide fragment consists essentially of six repeats of the hexameric sequence represented in SEQ ID NO: 1~~.

66-73. **(Cancelled)**